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EXAMINER

STEELMAN, MARY J

ART UNIT	PAPER NUMBER
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2191

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/788,768	Applicant(s) OKKONEN, HARRI	
	Examiner MARY STEELMAN	Art Unit 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1024 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to Claim Amendments and Remarks received 07/19/2007. Per Applicant's request, claims 1-22 & 24 are amended. Claims 1-24 are pending.

Information Disclosure Statement

2. IDS received 07/19/2007 has been considered. Note that reference #53 was not provided in the IDS documents. References 54 & 56 did not provide an English translation. Examiner located a translated abstract of all three documents of the above mentioned documents through the JPO (Japanese Patent Office) and has included them in References Cited, Form 892.

Claim Rejections - 35 USC § 101

3. In view of the amendment to claim 1, the prior 35 U.S.C. 101 rejection is hereby withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new grounds of rejection. Amended limitations have been rejected using new prior art.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent Application Publication 2003/0065738A1 to Yang et al., in view of USPN 5,790,800 to Gauvin et al.

Per claim 1:

A network that facilitates interactions between one of a plurality of software components in a electronic device and an associated one of a plurality of servers in the network, the network comprising: a service broker capable of receiving at least one request for service associated with one of the plurality of software components; the service broker capable of determining the one of the plurality of servers associated with the one of the plurality of software components, based upon...the at least one request for service; and the service broker capable of forwarding the at least one request for service to the determined one of the plurality servers.

Yang: See FIG 1b. Network [0023], application program manager that controls updating and downloading of application. Application program manager is a software module that is stored in and executed by the wireless information processing apparatus...to manage application programs, direct storage and execution of incoming and outgoing information.

[0042], Call center 130 preferably includes an agent 132 that handles requests from mobile users...tracks stored application programs available for downloading to mobile users.

[0043], file server/ file storage locations 150, connected to network 115 may be local or remote to call center 130. [0043], mobile device 110 may request new application programs

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Yang fails to explicitly disclose:

-based upon a prior registration associating the one of the plurality of servers with the one of the plurality of software components making the at least one request for service

However, Gauvin disclosed (FIG. 1) & Col. 3: 56-58, a plurality of server computers 111-113 configured to provide computing services to multiple client computers, via a network. Col. 3, lines 65-67, “the mobile computer includes a communications manager (CM) 200 to provide connectivity between registered (registration associating the one of the plurality of servers with the one of the plurality of software components) mobile client application 210 and the fixed servers 111-113.”

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Yang, using the teachings of Gauvin, because Yang recognized the need to relate mobile services to mobile devices [0008], in an effort to [0021] enable mobile devices to obtain information and services over a wireless communications network. Likewise, Gauvin recognized the (Gauvin – col. 1: 24-27) need for client application programs to have the knowledge and capability to establish /manage communications and to (col. 2: 14-16) simplify the operation of mobile computers in a distributed computer environment.

Per claim 2:

-the service broker capable of selectively communicating a response from the determined one of the plurality of servers to the one of the plurality of software components in the electronic

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device.

Yang: [0045], call center receives request and searches database or other sources to confirm location of requested program [0046], call center sends message to mobile device containing the retrieve command

Per claim 3:

-the service broker is a software component in the electronic device.

Yang: [0048], Application manager 112 represents a program for managing application programs in mobile device 110.

Per claim 4:

-one of the plurality of servers comprises a download server capable of receiving a request for an update package, the download server capable of sending the requested update package to the one of the plurality of software components in the electronic device.

Yang: [0091], Web server 855 receives the request and responds to the application server 840 with an XML document 835 containing information retrieved from database 830 for updating the application program data in mobile device 810.[0109], downloading application

Per claim 5:

-the update package comprises a set of executable instructions for converting a first version of a software component to a second version of the software component.

Yang: [0109]

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Per claim 6:

-the service broker forwards the update package to at least one of the plurality of software components in the electronic device.

Yang: [0055], application manager 112 categorizes the downloaded or updated application program into appropriate locations of a memory on mobile device 110.

Per claim 7:

-the one of the plurality of software applications in the electronic device comprises an update agent capable of processing an update package, the update agent capable of being invoked by the service broker when an update package is communicated to the electronic device.

Yang: [0051], The located data is then composed into a trigger message to trigger the mobile device 110 to download the requested application program from a file storage location...trigger message is a short wireless message

Per claim 8:

-the update package comprises a set of executable instructions for converting a first version of a software component to a second version of the software component.

Yang: [0109]

Per claim 9:

-the at least one request for service comprises an asynchronous request; and the service broker is

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capable of communicating a response received from the one of the plurality of servers back to the one of the plurality of software components.

Yang: [0054], asynchronous request

Per claim 10:

-the at least one request for service comprises an asynchronous request; the one of the plurality of software components registers callback information with the service broker; and the service broker communicates a response received from the one of the plurality of servers back to the one of the plurality of software applications based upon the registered callback information.

Yang: [0056], The results of the search are data retrieved in the format of an XML document...converted into a trigger message 350, e.g., SMS format and sent to the mobile device 350 via the messaging center 106.

Per claim 11:

-service broker is a server communicatively coupled to the electronic device.

Yang: See FIG 8b, communicatively coupled to the electronic device.

Per claim 12:

-the service broker server determines which one of the plurality of servers is available and capable of processing the at least one service request, and subsequently forwards the request to the determined one of the plurality of servers.

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Yang: [0043], stored on one or more file storage locations 150 (e.g., file server) connected to network 115.

Per claim 13:

-the determined one of the plurality of servers is forwarded the at least one service request for processing, and a response from the determined one of the plurality of servers is forwarded to the one of the plurality of software components.

Yang: [0046], if the search confirms the existence and location of the requested application program, the call center sends a message to the mobile device of the requestor containing a file retrieve command (response is forwarded to the one of the plurality of software components).

Per claim 14:

-the determined one of the plurality of servers: processes the at least one service request, the at least one service request comprising a request for a software update from the one of the plurality of software components; retrieves an update package and associated information; and communicates the update package and associated information to the electronic device.

Yang: [0046], [0090-0091]

Per claim 15:

-the plurality of software components comprises a download agent and an update agent; the download agent is capable of requesting a software update from the service broker server, and receiving in response an update package from the service broker server; and the update agent is

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capable of processing the received update package for updating at least one of firmware and software in the electronic device.

Yang: [0097], application manager is a software of firmware application that resides on a memory of the mobile device. Application manager is capable of requesting software update, receiving a response, processing the received update package [0109].

Per claim 16:

A wireless network supporting at least one electronic device, the network comprising: a service broker communicatively coupled to the at least one electronic device; a plurality of service providers, each of the plurality of service providers communicatively coupled to the service broker; a client-side component in the at least one electronic device that requests a software update from one of the plurality of service providers; and wherein the service broker determines the appropriate one of the plurality of service providers to respond to the software update request...

Yang: [0073], the update request is then sent to the appropriate web server (plurality of service providers), [0073], the application server (service broker), update request (client side component in the electronic device that request a software update)

Yang fails to explicitly disclose:

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- based upon an association of the one of the plurality of service providers with the client-side component that made the request.

However, Gauvin disclosed (FIG. 1) & Col. 3: 56-58, a plurality of server computers 111-113 configured to provide computing services to multiple client computers, via a network. Col. 3, lines 65-67, “the mobile computer includes a communications manager (CM) 200 to provide connectivity between registered (association the one of the plurality of servers with the one of the client-side component) mobile client application 210 and the fixed servers 111-113.”

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Yang, using the teachings of Gauvin, because Yang recognized the need to relate mobile services to mobile devices [0008], in an effort to [0021] enable mobile devices to obtain information and services over a wireless communications network. Likewise, Gauvin recognized the (Gauvin – col. 1: 24-27) need for client application programs to have the knowledge and capability to establish /manage communications and to (col. 2: 14-16) simplify the operation of mobile computers in a distributed computer environment.

Per claim 17:

-a generic intelligent responsive agent in the electronic device, the generic intelligent responsive agent communicatively coupled to the service broker; the generic intelligent responsive agent capable of establishing a communication link with the service broker server; the generic intelligent responsive agent capable of forwarding the software update request and associated

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information from the client-side component to the service broker; and the service broker server determining one of the plurality of service providers as a target server capable of processing the software update request and forwarding the software update request to the target server.

Yang: [0090-0091], application manager 811 (generic intelligent responsive agent) See rejection of limitations addressed above. System is networked. Client wireless device requests update. Servers process update and communicate back to wireless device. Wireless device application manager provides logic to retrieve and install update.

Per claim 18:

-the target server: processes the received software update request; retrieves an appropriate update package and associated information; and communicates the appropriate update package and associated information back to the generic intelligent responsive agent for subsequent communication to the associated client-side component.

Yang: [0090-0091]

Per claim 19:

-the generic intelligent responsive agent: acts as a proxy for the client-side component; and provides one of asynchronous communication and synchronous communication facilities for interactions with the target server.

Yang: [0054]

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Per claim 20:

-the electronic device further comprises: a registration client capable of-maintaining a plurality of registration entries, each registration entry associated with a client-side software component, each entry comprising at least one of a name, a version, a plurality of dependencies, a status that specifies current operational status, a plurality of callback functions, an associated parameter, an event, and a return type; a set of configuration parameters; a client-side software component specific update agent capable of updating at least one of the set of configuration parameters and the client-side software component; and a server URL that specifies a service provider and associated relevant information.

Yang: [0050], [0079], server URL [0085], application manager categorizes and groups the application program to an appropriate section of the mobile device memory...the application manager will replace the old data in the mobile device memory such as RAM or memory card...with data contained in the incoming short wireless message. The application manager may reorganize and/or update a database for tracking application program updates 755.

Per claim 21:

-electronic device further comprises security information.

Yang: [0060], encrypted security

Per claim 22:

A method for updating at least one of a software component and software component configuration information in an electronic device communicatively coupled to a service broker,

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the method comprising: under the control of the electronic device...under the control of the service broker, receiving an update request; determining a service provider based upon the update request; invoking update functionality on the determined service provider; and transmitting results of the invoked update functionality to the mobile device.

Yang: [0090-0091] [0094], The server receives the request, retrieves the information, composes the information into a short wireless command message, and sends the short wireless command message thru wireless connection to mobile device.

Yang failed to explicitly disclose:

registering at least one call-back function available in the software component; communicating, to the service broker, a request for updating of at least one of the software component and software component configuration; receiving results from a remote service provider; and invoking the at least one call-back function using the received results

However, Gauvin disclosed (col. 5: 24-30) call back procedures to notify the registered client applications 210 of connection events. (FIG. 2, #226)

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Yang, using the teachings of Gauvin, because Yang recognized the need to relate mobile services to mobile devices [0008], in an effort to [0021] enable mobile devices to obtain information and services over a wireless communications network. Likewise, Gauvin recognized the (Gauvin – col. 1: 24-27) need for client application programs to have the

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knowledge and capability to establish /manage communications and to (col. 2: 14-16) simplify the operation of mobile computers in a distributed computer environment.

Per claim 23:

-under the control of the electronic device, communicating the received results to an update agent capable of updating the at least one of the software component and software component configuration.

Yang: [0109]

Per claim 24:

-under the control of the electronic device, communicating a request by the software component to a generic intelligent responsive agent, the request comprising a command to be invoked on the remote service provider and parameters to be passed to it; communicating the request to the service broker; and communicating the received results to the software component, under the control of the service broker, receiving an update request; determining a service provider based upon the update request; invoking update functionality on the determined service provider; and transmitting results of the invoked update functionality to the generic intelligent responsive agent.

Yang: [0090-0091]

Conclusion

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

NOTE:

USPN 6,970,917 B1 to Kushwaha et al. – manage, control, reconfigure wireless devices remotely...transmitting registration information...from the wireless device to the server, verifying the registration

USPN 7,010,303 B2 to Lewis et al. – plurality of host services / systems and a plurality of wireless networks...mobile network message at a mobile device is generated, transmitted to wireless router which in turn routes ...to the appropriate host service col. 7: 9-13, installation of host software

US Patent Application Publication 2005 / 0148323 A1 to Little et al. - service request is prepared at client and sent to proxy system service module, which re-sends to information providers, selected response is prepared and returned to proxy system client module based on the selected response.

Japanese Patent Application 2001-233353 to Yazaki Corporation – wirelessly transmits information registered to other base station. Base stations receive the information and access a server.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached at (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman

09/20/2007

MARY STEELMAN
PRIMARY EXAMINER

A handwritten signature in cursive script, appearing to read 'Mary Steelman', is written over the printed name and title.